



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,571

09/27/2006

Takeshi Ikeda

2006_1611A

6585

513 7590 09/12/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

GLASS, ERICK DAVID

ART UNIT

PAPER NUMBER

2837

MAIL DATE

DELIVERY MODE

09/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,571	Applicant(s) IKEDA ET AL.	
	Examiner Erick Glass	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-28,30 and 31 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 20, 21, 24, 25, 26, 27, 30 and 31, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim language containing "without using the relative positional signal", "abnormal due to a malfunction in the outputting the motor pulses", is unsupported by the original specification.

Specification

The amendment filed 5/8/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "i.e. without using the relative position signal", "abnormal due to a malfunction in the outputting the motor pulses".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-28, 30, and 31, are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki et al (US 6,240,098).

With respect to claim 13, Miyazaki teaches driving a motor (fig. 1, 5) connected to a wiper arm (fig. 8, 2) so as to rotate the motor in a forward direction and a reverse direction to thereby reciprocate the wiper arm so as to perform a wiping operation (abstract); controlling said driving of the motor according to an absolute position signal (fig. 3, 18) and a relative position signal (fig. 3, 17), the absolute position signal being output when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing positions), and the relative position signal being output as a function of the rotation of the motor; and reversing a direction of rotation of the motor according (column 5, lines 50-63; column 6, lines 1-9) to the absolute position signal without using the relative position signal when the relative position signal becomes abnormal (column 5, lines 64-65; column 6, lines 10-12).

With respect to claim 14, Miyazaki teaches wherein the absolute position signal is output when the wiper arm is at a first reference position near an upper turning point (fig. 4, upper reversing position), and when the wiper arm is at a second reference

Art Unit: 2837

position near a lower turning point (fig. 4, lower reversing position); and when the relative position signal becomes abnormal (column 5, lines 64-65; column 6, lines 10-12), the direction of rotation of the motor is reversed according to the absolute position signal output at the first reference position and the absolute position signal output at the second reference position (column 5, lines 50-63; column 6, lines 1-9).

With respect to claim 15 and 17, Miyazaki teaches comprising reversing the direction of rotation of the motor after a predetermined time period has elapsed since the last absolute position signal was output (column 7, lines 34-38).

With respect to claim 16 and 18, Miyazaki teaches comprising reversing the direction of rotation of the motor when the absolute position signal is output (column 7, lines 34-38).

With respect to claim 19, Miyazaki teaches wherein the relative position signal is generated based on motor pulses output according to the rotation of the motor, the relative position signal becoming abnormal due to a malfunction in outputting the motor pulses.

With respect to claim 20, Miyazaki teaches driving a motor (fig. 1, 5) connected to a wiper arm (fig. 8, 2) so as to rotate the motor in a forward direction and a reverse direction to thereby reciprocate the wiper arm (abstract) between an upper turning point (fig. 4, upper reversing position) and a lower turning point (fig. 4, lower reversing position) so as to perform a wiping operation; controlling said driving of the motor according to an absolute position signal (fig. 3, 18) and a relative position signal (fig. 3,

Art Unit: 2837

17), the absolute position signal being output when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing positions), and the relative position signal being output as a function of the rotation of the motor (column 5, lines 50-67; column 6, lines 1-12); mechanically restricting movement of the wiper arm at an upper operation limiting position beyond the upper turning point (column 6, lines 21-47; column 2, lines 46-52) and a lower operation limiting position beyond the lower turning point by a restriction mechanism; and reversing a direction of rotation of the motor when the relative position signal becomes abnormal (column 5, lines 64-65; column 6, lines 10-12) and movement of the wiper arm is restricted by the restriction mechanism.

With respect to claim 21, 26 and 30, Miyazaki teaches wherein said reversing a direction of rotation of the motor is performed (column 5, lines 50-67; column 6, lines 1-12) without using the relative position signal.

With respect to claim 22, Miyazaki teaches wherein said reversing the direction of rotation of the motor is performed when the wiper arm is located at either of the upper operation limiting position and the lower operation limiting position (column 5, lines 50-67; column 6, lines 1-12) and the motor is in a stopped condition due to said mechanically restricting (column 6, lines 21-47; column 2, lines 46-52) movement of the wiper arm.

With respect to claim 24, 27, and 31, Miyazaki teaches wherein the relative position signal is generated based on motor pulses output according to the rotation of

Art Unit: 2837

the motor, the relative position signal becoming abnormal due to a malfunction in outputting the motor pulses (column 5, lines 50-67; column 6, lines 1-12).

With respect to claim 25, Miyazaki teaches driving a motor (fig. 1, 5) connected to a wiper arm (fig. 8, 2) so as to rotate the motor in a forward direction and a reverse direction to thereby reciprocate the wiper arm so as to perform a wiping operation (abstract); controlling said driving of the motor according to an absolute position signal (fig. 3, 18) and a relative position signal (fig. 3, 17), the absolute position signal being output when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing positions), and the relative position signal being output as a function of the rotation of the motor; and driving the motor at a constant rate (fig. 3, 27) and reversing a direction of rotation of the motor at predetermined time intervals when the relative position signal becomes abnormal (column 5, lines 50-67; column 6, lines 1-12).

With respect to claim 28, Miyazaki teaches driving a motor (fig. 1, 5) connected to a wiper arm (fig. 8, 2) so as to rotate the motor in a forward direction and a reverse direction to thereby reciprocate (abstract) the wiper arm between an upper turning point (fig. 4, upper reversing position) and a lower turning (fig. 4, lower reversing position) point so as to perform a wiping operation; controlling said driving of the motor according to an absolute position signal (fig. 3, 18) and a relative position signal (fig. 3, 17), the absolute position signal being output when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing positions), and the relative position signal being output as a function of the rotation of the motor (column 5, lines 50-67; column 6, lines 1-12); reversing a direction of rotation of the motor according to the absolute

Art Unit: 2837

position signal when the relative position signal becomes abnormal; mechanically restricting movement of the wiper arm at an upper operation limiting position (column 6, lines 21-47; column 2, lines 46-52) beyond the upper turning point and a lower operation limiting position beyond the lower turning point by a restriction mechanism; and reversing the direction of rotation of the motor when the wiper arm is located at either of the upper operation limiting position and the lower operation limiting position and when both the absolute position signal and the relative position signal become abnormal (column 5, lines 50-67; column 6, lines 1-12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al (US 6,240,098).

With respect to claim 23, Miyazaki does not teach wherein the motor is determined to be in a stopped condition when a flow rate of electric current being supplied to the motor exceeds a predetermined level.

It would have been obvious to one having ordinary skill in the art at the time of the invention when current exceeds a predetermined limit and has no travel, that is why

Art Unit: 2837

fuses and circuit breakers are applied to circuits to solve problems, a known method that yield predictable results.

Claims 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 5/8/2008 have been fully considered but they are not persuasive.

The amendments made to the new claim language are not all supported by the original specification. Miyazaki teaches all the claim language in its entirety. The signals of Miyazaki change with certain position and output new signals, making them abnormal (different from the usual or average). Abnormal is not defined as unavailable, or without using the relative position signal according to the applicants original specification. Miyazaki teaches restricting movement of the wiper through signal and position, along with the hardware that implements the operations. The control system has electrical limitations that limit the system, that are produced mechanically from the motor through the wiper arm to the wiper (covering the wiper range). So the movement is restricted both electronically and mechanically.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2837

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is (571)272-8395. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erick Glass/
Examiner, Art Unit 2837

/Walter Benson/
Supervisory Patent Examiner, Art Unit 2837